Now—

measure to $\frac{1}{10{,}000}$*th*
at no extra cost

Announcing a new development in Reed Micrometers, one of America's finest measuring tools

Tolerances in "tenths" have come to stay. The precision demands of war materials have made these standards a part of today's production picture. In the world of tomorrow they will be a commonplace. Micrometers reading only to thousandths are even now often inadequate, and may well become obsolete.

Right in step with this development, the manufacturers of REED Micrometers announce that, effective immediately, *but with no increase in price,* all REED Micrometers up to 3-inch will be provided with graduations enabling accurate and easy readings to 1/10,000 of an inch.

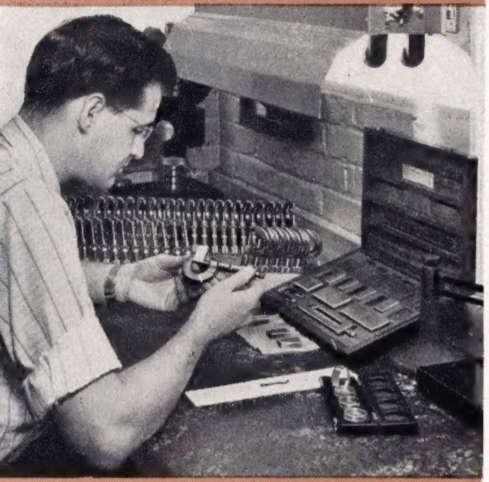
A mechanic is judged by his tools. Make sure that your tool chest contains modern precision measuring tools. Buy your REED Micrometer with "tenths" at no extra cost today.

REED MICROMETERS

Exclusive Distributors

GEORGE SCHERR CO., Inc.
Headquarters for Precision Machines and Measuring Tools of Highest Quality
200 Lafayette Street, New York 12, N. Y.

Thirty years of speci



Checking Reed Micrometers with gage blocks throughout entire length. Note Optical Parallels which test planeness and parallelism of anvils in four positions within one revolution of the screw. EACH MICROMETER MUST PASS THESE CRITICAL TESTS BEFORE ACCEPTANCE.

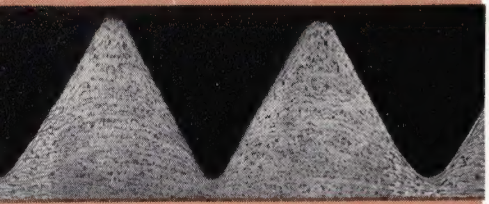


Photo-micrograph of a Reed Spindle showing how their unique process of thread forming results in a spindle with fibers elongated and re-arranged to follow the contour of the thread and with a surface work hardened and burnished for maximum accuracy and wear resistance.

The Toolmaker Microscope and other optical instruments are in continuous use at the Reed plant to guard precision of screw threads, to insure accuracy of lead, pitch diameters etc.

NEW and BETTER METHODS

Over the past thirty years the Reed factory has developed manufacturing methods which deviate considerably from conventional practice. These methods enable us to offer you a tool of outstanding accuracy with vernier reading to 1/10000″ added without cost, as well as certain other advantages listed below.

UNIFORM ACCURACY

- Lead accuracy over the full range of the screw is within a fraction of 1/10000″ due to REED'S process used in forming the micrometer thread.

GREATER DURABILITY

- Longer life of the micrometer screw due to a burnishing process which compresses the surface of the thread making the steel more dense, resulting in greater resistance to wear.

EASIER READING

- Easy reading graduations on thimble and vernier due to freedom from glare and reflection.

SMOOTH, UNIFORM "FEEL"

- The Reed process of forming the micrometer thread results in a surface finish of uniform smoothness, without grinding or polishing operations. Careful inspection at every step during the entire manufacturing process is the secret of uniform accuracy and high quality at greatly reduced cost. Illustrated at left, are two of the numerous inspection procedures through which every Reed Micrometer must go before it reaches the user.

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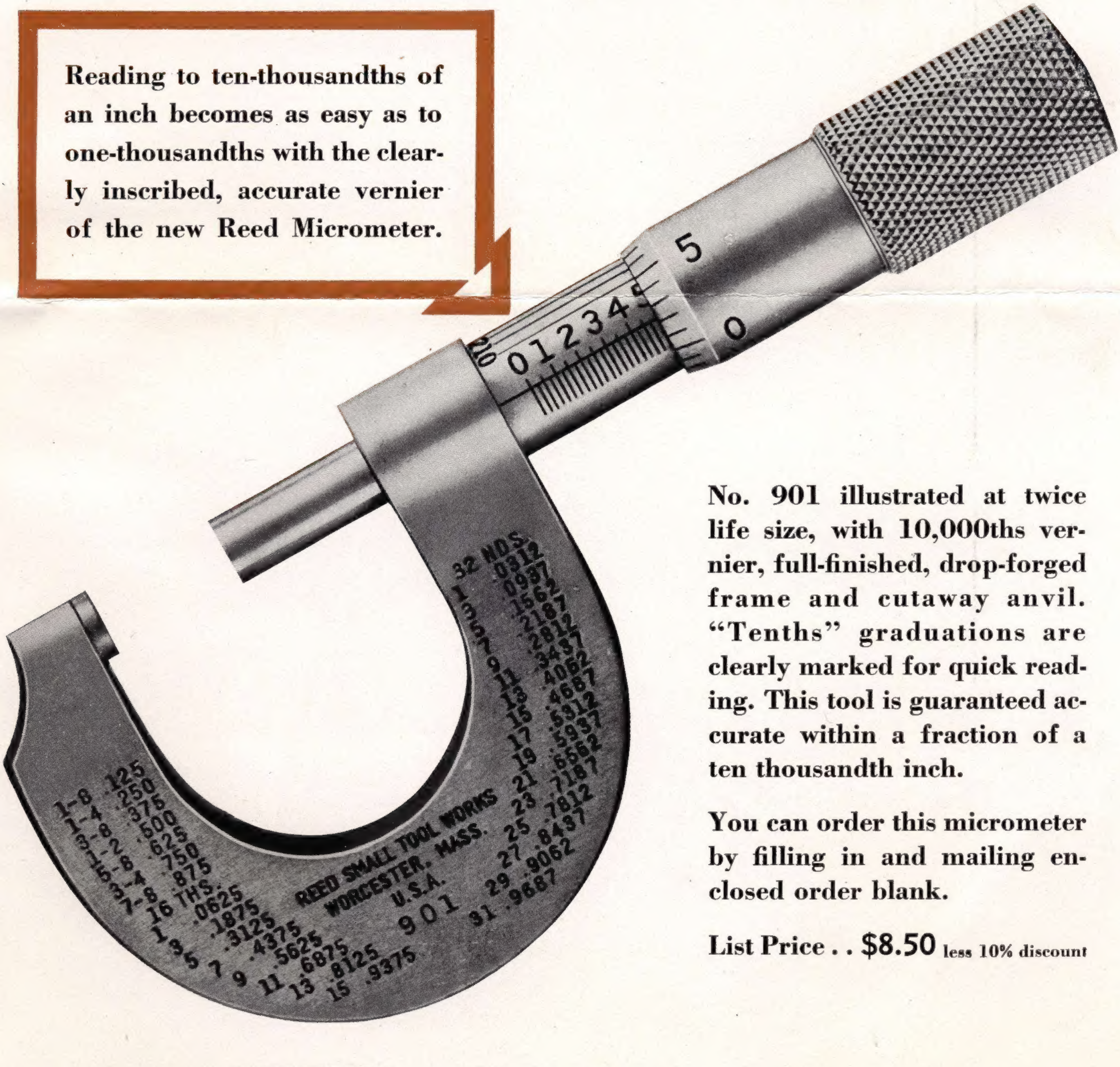
today's REED MICROMETER

Reading to ten-thousandths of an inch becomes as easy as to one-thousandths with the clearly inscribed, accurate vernier of the new Reed Micrometer.



TWICE LIFE SIZE

No. 901 illustrated at twice life size, with 10,000ths vernier, full-finished, drop-forged frame and cutaway anvil. "Tenths" graduations are clearly marked for quick reading. This tool is guaranteed accurate within a fraction of a ten thousandth inch.

You can order this micrometer by filling in and mailing enclosed order blank.

List Price . . $8.50 less 10% discount

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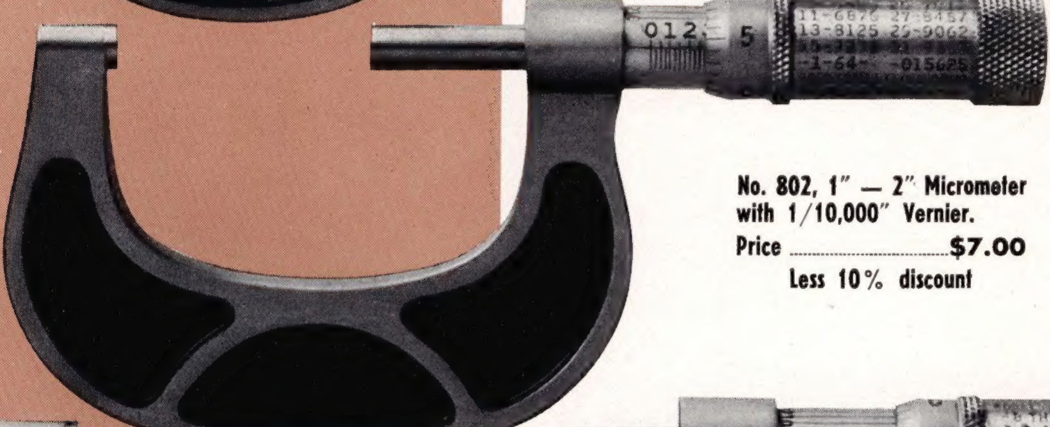
No. 801, 1″ Micrometer with 1/10,000″ Vernier.

Price $6.25

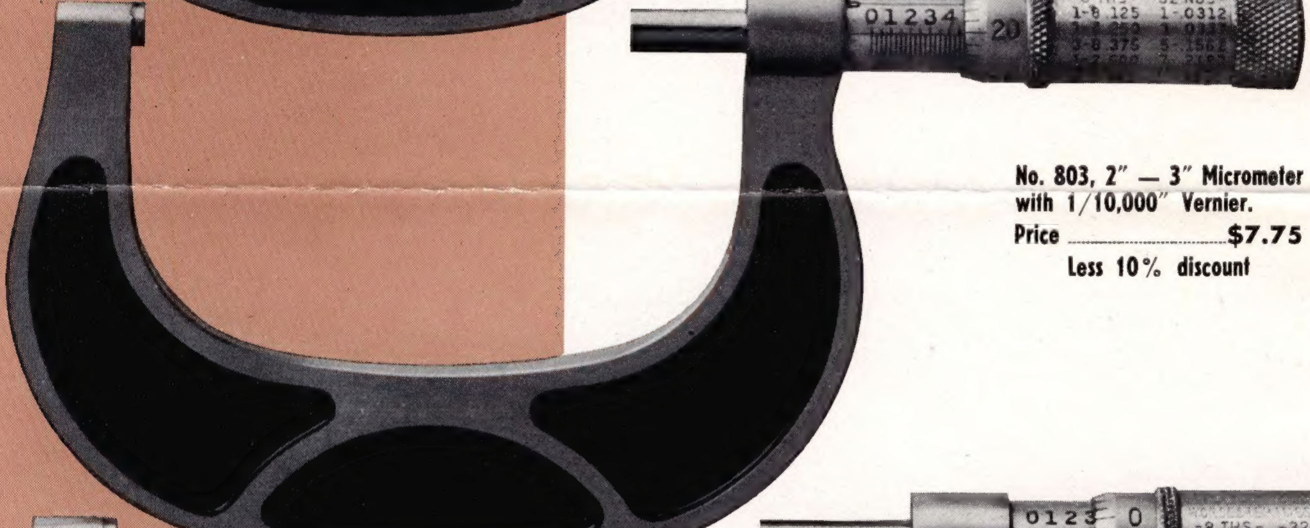
Less 10% discount



No. 802, 1″ — 2″ Micrometer with 1/10,000″ Vernier.

Price $7.00

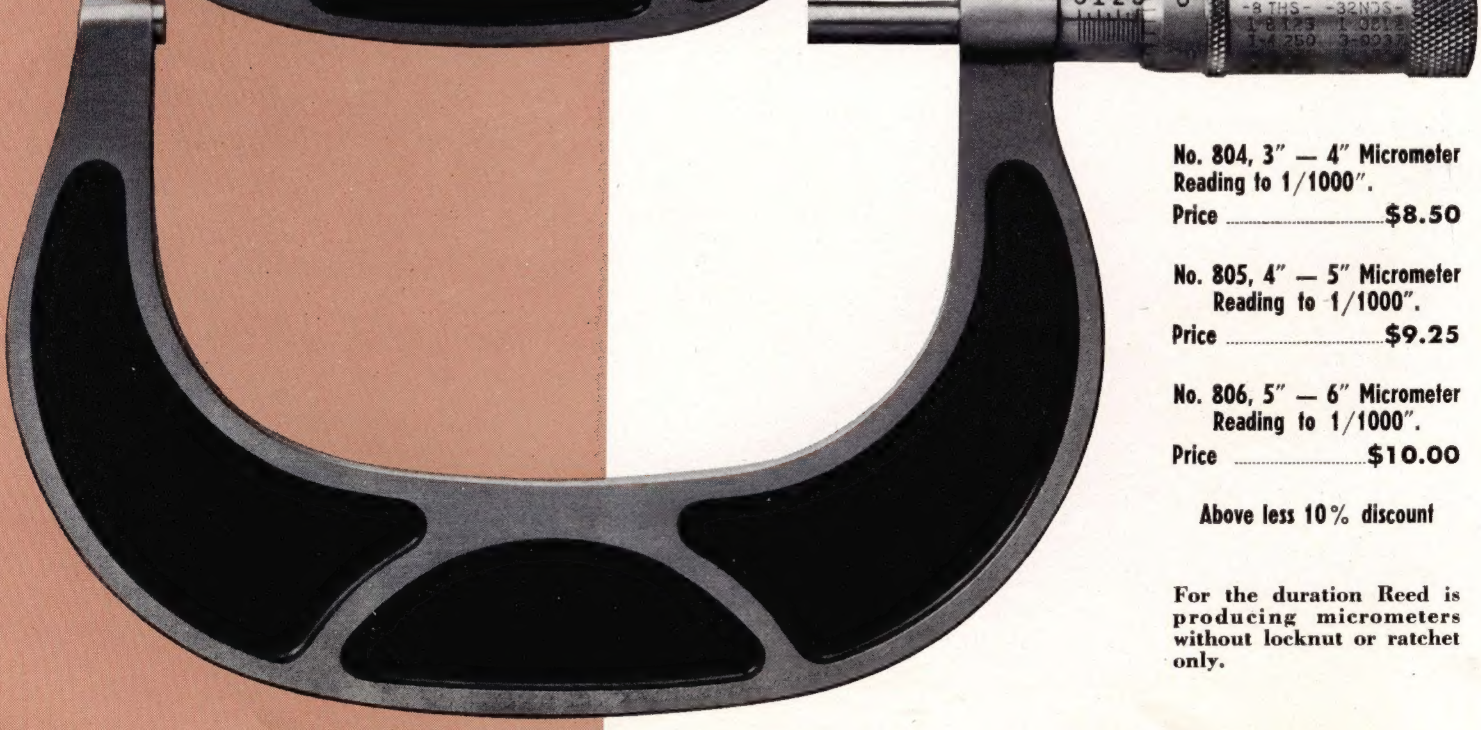
Less 10% discount



No. 803, 2″ — 3″ Micrometer with 1/10,000″ Vernier.

Price $7.75

Less 10% discount



No. 804, 3″ — 4″ Micrometer Reading to 1/1000″.

Price $8.50

No. 805, 4″ — 5″ Micrometer Reading to 1/1000″.

Price $9.25

No. 806, 5″ — 6″ Micrometer Reading to 1/1000″.

Price $10.00

Above less 10% discount

For the duration Reed is producing micrometers without locknut or ratchet only.

opular

D 800 SERIES . . .

igh Quality — Same Accuracy

A micrometer specially developed for all-round, general shop use, with workmanship of the same high standard as in the 901 Model, rigid drop forged frame, stiffened by panel design. Decimal equivalents on thimble. A sturdy, serviceable tool, at a price which puts the entire set–1″ to 6″–within the budget of every mechanic.

Under today's conditions mechanics cannot afford to waste time requisitioning or borrowing larger size micrometers from the tool crib.

With so much work within the 3″ range, that must be accurate to "tenths", it will pay every man to have his own 0 - 1″, 1 - 2″ and 2 - 3″ Reed Micrometer reading to 1/10000″, and a 4″, 5″ and 6″ micrometer graduated to 1/1000″ for larger measurements.

These six micrometers can be purchased individually or in sets of six.

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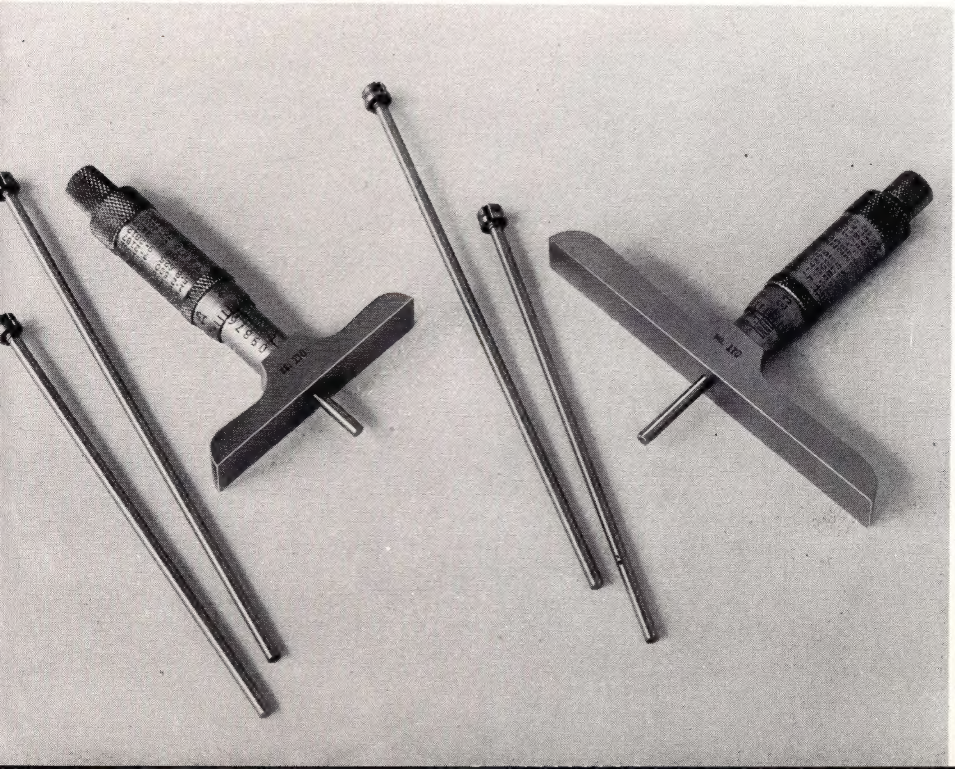


REED MICROMETER DEPTH GAGES with 2½" and 4" base

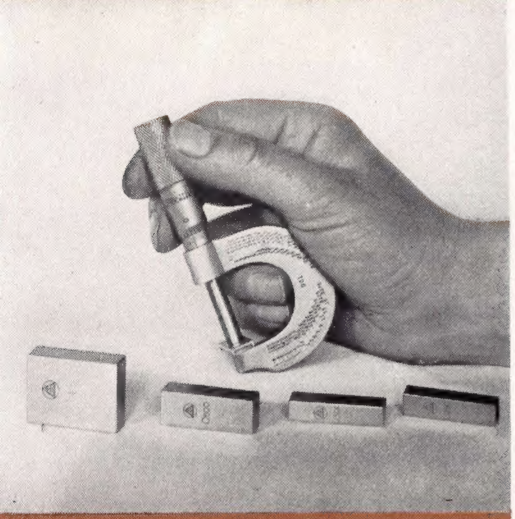
The Reed Micrometer Depth Gage is an outstanding precision tool for the most accurate work. It is used largely for measuring holes, grooves, shoulders, aircraft cylinders, wherever it is necessary to measure depth from 0 - 3″ in 1/1000″. Three interchangeable rods to measure 1″, 2″ and 3″ are provided. The rods are easy to insert and are held to a positive seat by the knurled rod cap. Each rod is provided with an adjusting nut which compensates for wear.

Reed Micrometer Depth Gages come in two models, with either 2½″ or 4″ base, made of case hardened steel.

Depth Gage No. 170 with 2½″ base and three rods	$9.00
Depth Gage No. 170 with 4″ base and three rods	$10.25

Select the Reed Depth Micrometer you require in your work and order now.

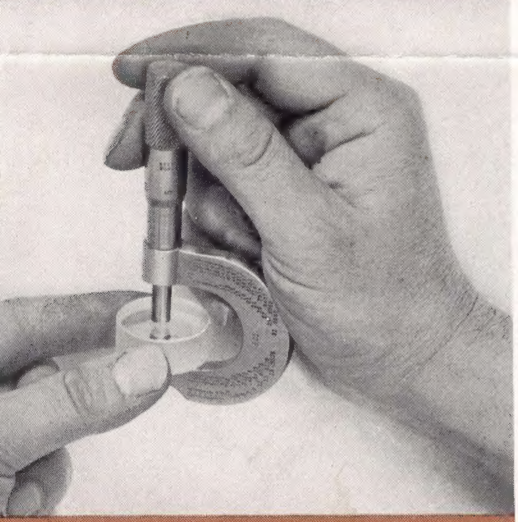
Enduring Precision



GUARANTEED ACCURACY

Reed Micrometers must undergo a series of severe inspection steps before any tool leaves the factory. Thus, we can guarantee an accuracy of a fraction of one ten thousandth for the full length of the screw. We invite you to check the Reed Micrometer you purchase in any way you wish. Take a nine block Ultra-Chex set, as illustrated, and check the lead accuracy against a series of three or more gage blocks. You will find the lead to be extremely accurate.

The 9 block Ultra-Chex set consists of the following blocks enabling you to make up 331 combinations. .0625″ - .100″ - .125″ .200″ - .250″ - .300″ - .500″ - 1″ - 2″. This small, reasonably priced set is indispensable to the mechanic. Order your set today. Price with optical flat **$27.50** without flat **$19.50.**

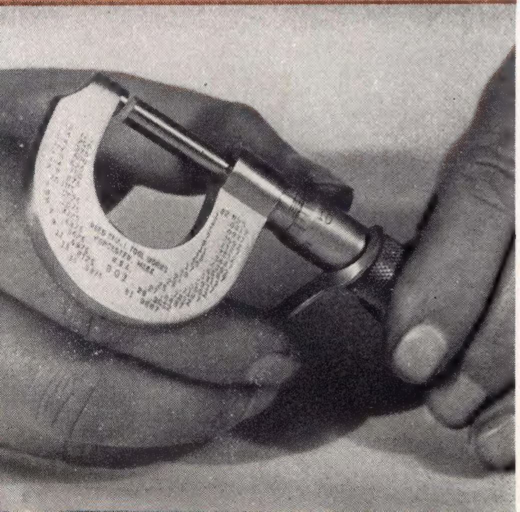


CHECKING PARALLELISM and FLATNESS of spindle end and anvil

The factory also subjects each micrometer to the optical parallel test. A set of two optical flats is employed to make this test. Simply close the anvil and spindle upon the optical flat as illustrated, and note the degree of flatness and parallelism as indicated by the light waves that are readily apparent. Then take the second optical flat which is one-half a turn of the micrometer screw or about 12½ thousandths difference in size than the first parallel. This test enables you to ascertain the degree of flatness and parallelism in the new setting. When the interference bands appear uniformly in both settings, you can be sure that the micrometer anvil and spindle have been lapped flat and that the micrometer is parallel enough for the most accurate measurements.

The Scherr Micrometer Parallels illustrated above belong in every shop where micrometers are given consistent daily use. It is a good practice to check all micrometers frequently for flatness and parallelism. When working in "tenths", you cannot afford to take chances on taking critical measurements with a micrometer that may be out of parallel.

Price of set **$25.00.** Why not order now?



HOW TO ADJUST FOR WEAR

To adjust for wear on measuring surfaces, a special spanner wrench accompanies every Reed Micrometer. This should be used as shown in the photograph, the wrench inserted in the small hole in the sleeve. The sleeve can then be rotated the amount necessary to make the desired correction. The adjustment should be tested with the tool set at zero, being sure that there is no oil or dust on anvil and spindle surfaces. Every Reed Micrometer is set to zero before it leaves the factory, and normally requires adjustment only after considerable use.

is easily maintained in REED MICROMETERS

HOW TO READ "TENTHS" with the Vernier

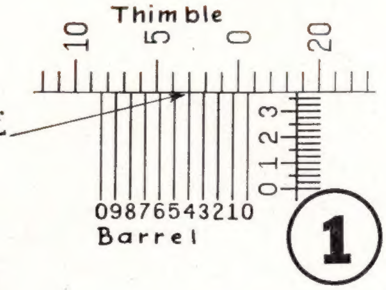
Tenths of thousandths on Reed Micrometers are read by means of a vernier. This vernier is engraved in ten equally spaced lines on the barrel of the micrometer from zero to ten.

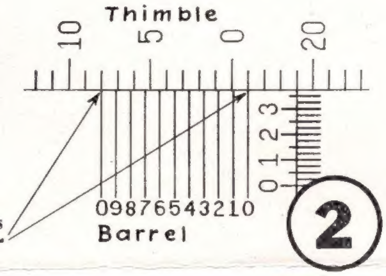
The ten lines are equal in length to nine lines on the thimble which is used to read to 1/1000". Each vernier division is one tenth smaller than the division on the thimble of the micrometer. In other words, the difference in space between two lines on the barrel and two lines on the vernier is 1/10000".

To read your Reed Micrometer to 1/10000", first obtain the thousandths reading in the usual way. Thereafter, count the number of lines appearing on the barrel until you reach two lines, one on the barrel and one on the thimble that exactly meet. Simply add the number of lines which represent "tenths" to the thousandths and you obtain your reading.

Above setting is .3714" as shown. You will note that the line marked four on the barrel corresponds with the line on the thimble indicating that the work is 4/10000" over .371. In illustration two there are no tenths to consider since both the first and last line on the vernier correspond exactly with the two lines on the thimble. This measurement is in equal thousandths and does not show tenths.

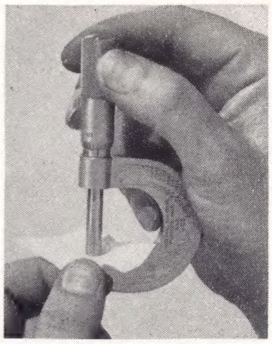
Reading 4/10000" on the vernier





Reading in even thousandths

When checking your Reed Micrometer for the original zero setting, be sure that the measuring surfaces of anvil and spindle are perfectly clean. By inserting a slip of paper, closing the micrometer on it and then removing while anvil and spindle are in contact, all dirt, oil and other foreign matter can quickly be removed.



A VALUABLE AUXILIARY the SCHERR TOOL STAND

For ease in adjusting Reed Micrometers we recommend the Scherr Tool Stand. This can be used to advantage in every shop for holding micrometers, snap gages and other tools. It is particularly valuable in freeing the operator's hands and speeding up inspection. The price of the Scherr Tool Stand is $7.50 net. We suggest you order a number of these for use in various parts of the shop, when placing your order for micrometers.

REED FREE MAINTENANCE SERVICE

Reed Micrometers are manufactured of the finest materials and each tool carries the factory's guarantee of accuracy and precision workmanship. It is natural, however, that under hard daily constant use any micrometer needs to be inspected and adjusted occasionally.

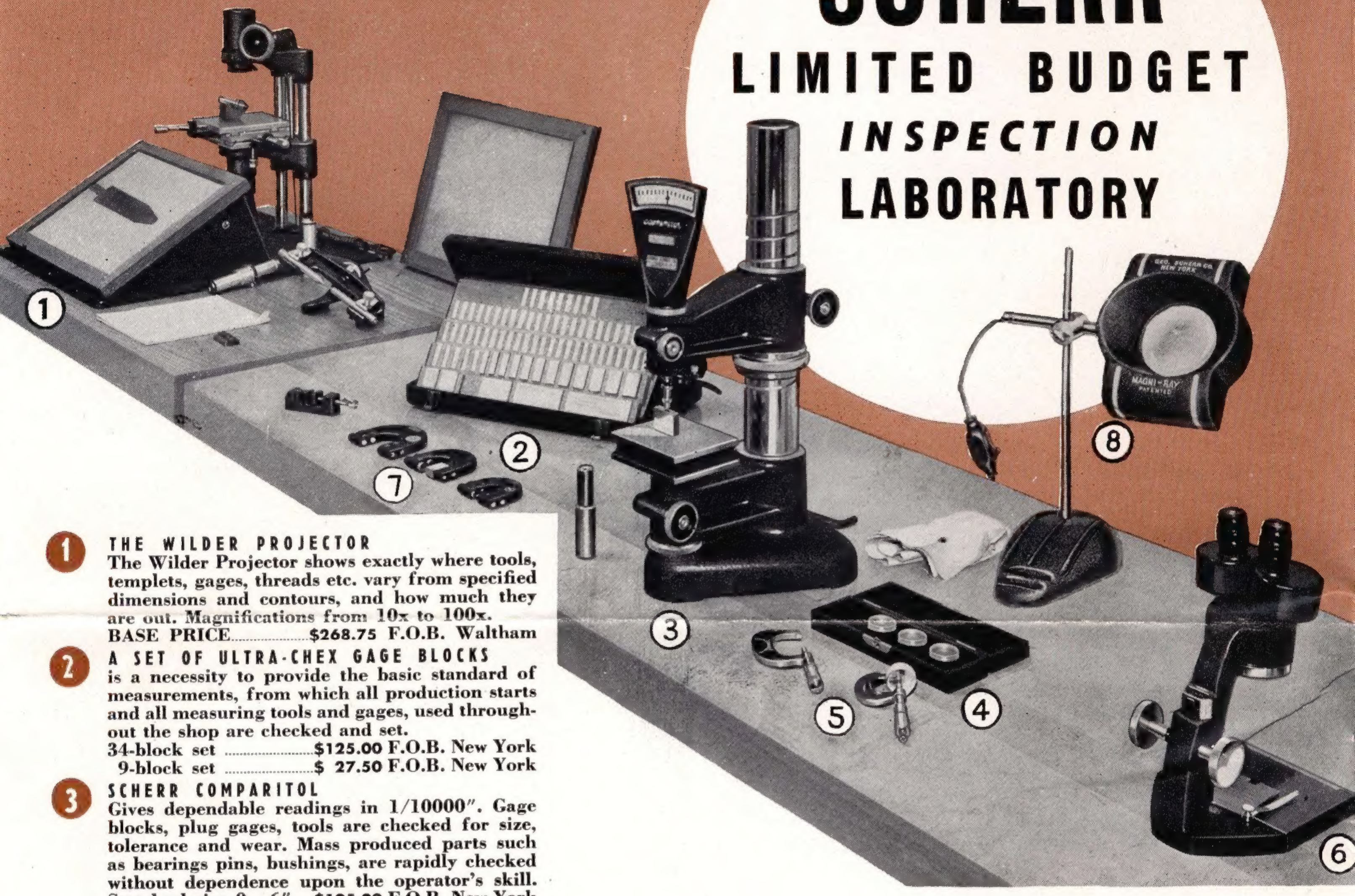
The Reed factory will at any time and without any charge to the user, inspect, clean, lap anvil and spindle square and adjust any micrometer of its manufacture regardless of age. It is understood, of course, that this free service does not apply to tools which have been mutilated or damaged.

If repair parts are needed, these will be furnished on your request at nominal prices.

With this free repair service, the REED SMALL TOOL WORKS stands squarely behind every micrometer it produces. This offer is made without any strings. Here is further evidence of the extreme confidence the manufacturers have regarding the reliability of Reed Micrometers. Micrometers requiring repairs should be sent direct to the Reed Small Tool Works, Worcester, Mass. for prompt service.

Every shop needs it
Any shop can afford it

The SCHERR
LIMITED BUDGET
INSPECTION
LABORATORY



❶ **THE WILDER PROJECTOR**
The Wilder Projector shows exactly where tools, templets, gages, threads etc. vary from specified dimensions and contours, and how much they are out. Magnifications from 10x to 100x.
BASE PRICE........$268.75 F.O.B. Waltham

❷ **A SET OF ULTRA-CHEX GAGE BLOCKS**
is a necessity to provide the basic standard of measurements, from which all production starts and all measuring tools and gages, used throughout the shop are checked and set.

34-block set	$125.00 F.O.B. New York
9-block set	$ 27.50 F.O.B. New York

❸ **SCHERR COMPARITOL**
Gives dependable readings in 1/10000″. Gage blocks, plug gages, tools are checked for size, tolerance and wear. Mass produced parts such as bearings pins, bushings, are rapidly checked without dependence upon the operator's skill.

Standard size 0 - 6″	$195.00 F.O.B. New York
Heavy-Duty 0 - 8″ size	$250.00 F.O.B. New York

❹ **OPTICAL PARALLELS**
Required to inspect the surface of gage blocks, lapped surfaces, and parallelism of micrometer anvils.

Single Parallel	$10.00
Set of 2 about .0125″ apart	$25.00

❺ **REED PRECISION MICROMETERS**
1″, 2″ and 3″ with vernier to 1/10000″, and 4″, 5″ and 6″ in 1/1000″. Also Depth Micrometers.

❻ **SPENCER BINOCULAR MICROSCOPE**
With three dimensional vision reveals scratches, surface finish, imperfections, which cannot be seen with ordinary microscopes showing one plane of vision $143.50

❼ **ATLANTIC ADJUSTABLE LIMIT SNAP GAGES**
Made to American Gage Design Standards. Frames of MEEHANITE.

❽ **THE SCHERR MAGNI-RAY**
An illuminated magnifier for inspection. Throws beam of light on object, while shielding operator's eyes.

1½ Power	$18.50
3 plus Power	$27.50

Toolmakers Microscope as shown on page 2. This instrument is essential for checking threads, angles and any kind of work that cannot be measured by ordinary methods. Ask for special catalog.

The Scherr Limited Budget Inspection Laboratory is low cost production insurance, and a positive guard against rejections, measurement disputes and loss of time, labor and material.

Write, wire or telephone Canal 6-3512 for quotations, delivery dates and complete literature.

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GEORGE SCHERR CO., Inc.

HEADQUARTERS FOR PRECISION TOOLS

200 Lafayette Street, New York 12, N. Y.